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SEQUENCE LISTING

<110> Athena Diagnostics

<120> COMPOSITIONS AND METHODS FOR GENETIC ANALYSIS OF POLYCYSTIC KIDNEY DISEASE

<130> 1133/2002

<140> US 10/033,246
<141> 2002-02-26

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<170> PatentIn version 3.1

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agtgtgctgt atggcccagg cagcctcaag gccctcggag ctggctgtgc ctgcttctgt        14040
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<210> 2
<211> 6749
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(6749)
<223> "r." at position 719, 1277, 1278, 1279, 1280, 1288, 1289, 1638, 1
       967, 2248, 2251, 2254, 2283, 2585, 2586, 2625, 2932, 2949, 2972,
       2978, 3406, is any of A, T, G, and C.

<223> "r." at position 3419, 3604, 3675, 3849, 4132, 4337, 4367, 4368, 4369,
       4396, 4404, 5700, 5701, 5702, 6611, 6628, 6637, 6700, 6733 is any
       of A, T, G, and C.

<400> 2
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accgcgatgg tgaactccag tcgcgtgcag cctcagcagc ccggggacgc caagcggccg        120

cccgcgcccc gcgcgccgga cccgggccgg ctgatggctg gctgcgcggc cgtgggcgcc        180

agcctcgccg ccccggccg cctctgcgag cagcggggcc tggagatcga gatgcagcgc        240
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atccggcagg cggccgcgcg ggaccccccg gccggagccg cggcctcccc ttctcctccg    300

ctctcgtcgt gctcccggca ggcgtggagc cgcgataacc ccggcttcga ggccgaggag    360

gaggaggagg aggtggaagg ggaagaaggc ggaatggtgg tggagatgga cgtagagtgg    420

cgcccgggca gccggaggtc ggccgcctcc tcggccgtga gctccgtggg cgcgcggagc    480

cgggggcttg ggggctacca cggcgcgggc caccgagcg gcaggcggcg ccggcgagag    540

gaccagggcc cgccgtgccc cagcccagtc ggcggcgggg acccgctgca tcgccacctc    600

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ggaactggtc acatacctcc tttttctcat agtcttgtgc atctgtaagt agaatatttc    900

cttgcactaa tgggaaagtt ttgaaacgat gtgaatttgt ccaaaatgtt tatccacagg    960

aacaatccct ttgtgaaggc tgctggtatg tggatgtgtg ccggttccct tggggcgttc    1020

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cacccggatg atgtcacagc tcttcctaga cacccccgtg tccaaaacgg agaaaactaa    1140

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ggatgggctg tactggaaga tgcagcccag caaccagact gaagctgaca accgaagttt    1380

catcttctat gagaacctgc tgttaggggt tccacgaata cggcaactcc gagtcagaaa    1440

tggatcctgc tctatccccc aggacttgag agatgaaatt aaagagtgct atgatgtcta    1500

ctctgtcagt agtgaagata gggctccctt tgggccccga aatggaaccg cgtaagtgtc    1560

tgtgactcat tggcactcgg tgatattcat ccttgtaatt gcctcaagtg ttccactgat    1620

tgtaactgtt tgttttt ngg ttttgttttt aatcagttgg atctacacaa gtgaaaaaga    1680

cttgaatggt agtagccact ggggaatcat tgcaacttat agtggagctg gctattatct    1740

ggatttgtca agaacaagag aggaaacagc tgcacaagtt gctagcctca agaaaaatgt    1800

ctggctggac cgaggaacca gggcaacttt tattgacttc tcagtgtaca acgccaacat    1860

taacctgttc tgtgtggtca ggtgtgtgac tgaggacatg catccctcct atttctgtgt    1920
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ggttgtacat acatcctatt ctagggttac ccagaaaaac cttttttntgc aggttgttat   1980

tgttttaatt gttcttattt acatgcaggt tattggttga attcccagca acaggtggtg   2040

tgattccatc ttggcaattt cagcctttaa agctgatccg atatgtcaca acttttgatt   2100

tcttcctggc agcctgtgag attatctttt gtttctttat cttttactat gtggtggaag   2160

agatattgga aattcgcatt cacaaactac actatttcag gagtttctgg aattgtctgg   2220

atgttgtgat cgttgtggta ggtccganca ncancaccaa atttcctatt ctattctaca   2280

agnatgttaa caattaatac attggtgaag aaaaatatac tagtcatatt aaggtaagtt   2340

tcatatttct aaaacactgt aataaaatat aaatattttg cttttcagct gtcagtggta   2400

gctataggaa ttaacatata cagaacatca aatgtggagg tgctactaca gtttctggaa   2460

gatcaaaata cttttccccaa ctttgagcat ctggcatatt ggcagataca gttcaacaat   2520

atagctgctg tcacagtatt ttttgtctgg attaaggtaa tttataaatt tcatgttcta   2580

cattnnaaat aatattttct ttaaaaaaaa tgagttccac aaaancatgc gaaacaatgt   2640

tttattatac acagtcacac catttggttt atccattcat ctattgatgt cttctctctc   2700

ttacagctct tcaaattcat caattttaac aggaccatga gccagctctc gacaaccatg   2760

tctcgatgtg ccaaagacct gtttggcttt gctattatgt tcttcattat tttcctagcg   2820

tatgctcagt tggcatacct tgtctttggc actcaggtcg atgacttcag tactttccaa   2880

gagtgtatgt aagtatatat gaaattaaga agaaaaattt agtcagagta gncactgttg   2940

cgtggacant ctttggtttt gtattgtggt gntttgtntt atttttatag cttcactcaa   3000

ttccgtatca ttttgggcga tatcaacttt gcagagattg aggaagctaa tcgagttttg   3060

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taaaactgaa aaaaaatacc gtggatgaca tttcagagag tctgcggcaa ggaggaggca   3540

agttaaactt tgacgaactt cgacaagatc tcaaagggtg agaatcatgc ttcctgaggt   3600

tctnaaaaat tcctgcttct aaagataaat tcctggtgat aagagtattt ctagcccaag   3660
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7

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tctttaccac gtcccatgag cagccgaagt ttccctcgaa gcctggatga ctctgaggag      4020

gatgacgatg aagatagcgg acatagctcc agaaggaggg gaagcatttc tagtggcgtt      4080

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gtccctctgt actgtgtttt ccttgcagcc tggtgagacg agtggaccgg atggagcatt      4200

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ctctggcata gttcatgagc ttaatacata gctttctttt aagaaggag ccttttcttt      5160

caactagctt cctggggtaa acttttctaa aagataaaat gggaaggaac tccaaactat      5220

gatagaatct gtgtgaatgg ttaagatgaa tgttaaatac tatgcttttt tgtaagttga      5280

tcgtatctga tgtctgtggg actaactgta tcacttaatt tttaccttat tttggctcta      5340
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8

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ggttagttta gcctaaagat ttatctgcat attctttttc ccatgtggct ctactcattt      5520

gcaactgaat ttaatgttat aactcatcta gtgagaccaa cttactaaat ttttagtatg      5580

cactgaaagt ttttatccaa caattatgtt cattttaagc aaaattttaa gaaagttttg      5640

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<210> 3
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<220>
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<222> (1)..(20)
<223> Synthetic primer

9

<400> 3
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<210> 4
<211> 23
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<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer


<400> 4
aaacagacac agacctgtga gag                                                    23

<210> 5
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<220>
<221> misc_feature
<222> (1)..(34)
<223> Synthetic primer


<400> 5
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<210> 6
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<220>
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<223> Synthetic primer


<400> 6
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<210> 7
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<220>
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<223> Synthetic primer

<400> 7
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<210> 8
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<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 8
gggaagtggg agacaagaga c                                                21

<210> 9
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<222> (1)..(21)
<223> Synthetic primer


<400> 9
aaagccctgc tgtcactgtg g                                                21

<210> 10
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<220>
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<222> (1)..(23)
<223> Synthetic primer


<400> 10
aactaaagcc cagaagacag acc                                              23

<210> 11
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<220>
<221> misc_feature

11

<223> (1)..(11)
<213> Synthetic primer


<400> 11
aactgtctgc cccagaacat c                                                    21

<210> 12
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<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer


<400> 12
ctaaaggctg ctctctcaac aag                                                  23

<210> 13
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<212> DNA
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<220>
<221> misc_feature
<222> (1)..(22)
<223> Synthetic primer


<400> 13
actcctgttg ggttttgatg ag                                                   22

<210> 14
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<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer


<400> 14
gagaactact ccttgtcct tgg                                                   23

<210> 15
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<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(24)
<223> Synthetic primer

<400> 15
atgccaagga caagggagta gttc                                              24

<210> 16
<211> 22
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(22)
<223> Synthetic primer

<400> 16
tgggctcctg gctggtgact gc                                                22

<210> 17
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<220>
<221> misc_feature
<222> (1)..(40)
<223> Synthetic primer

<400> 17
ttggcccgcc gccccgccg ctactgaccc gcaccctctg                              40

<210> 18
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<212> DNA
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<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer

<400> 18
gctgcgaggg gtgagacg                                                     18

<210> 19

<210> 42
<211> DNA
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<220>
<221> misc_feature
<222> (1)..(42)
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<400> 19
gcggcccgcc gccccgccg cgtccctccc gccctcctga cc                    42

<210> 20
<211> 36
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(36)
<223> Synthetic primer


<400> 20
gcccccgccg ctgcggacga gaaatctgtc tgcttg                          36

<210> 21
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<212> DNA
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<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 21
caggtctgca agcagacaga                                            20

<210> 22
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<212> DNA
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<220>
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<222> (1)..(20)
<223> Synthetic primer


<400> 22

ctgagctaag acgccctccc                                                        20

<210> 23
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<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 23
ctgtacgccc tcactggtgt c                                                       21

<210> 24
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<220>
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<222> (1)..(21)
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<400> 24
ggcataggg ctcagtcagt c                                                        21

<210> 25
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<223> Synthetic primer


<400> 25
ggactgactg agccctgtg c                                                        21

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<400> 26
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<210> 27
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<220>
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<400> 27
caacgtgtga gcctgagccc				20

<210> 28
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<400> 28
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<210> 29
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<212> DNA
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<220>
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<222> (1)..(32)
<223> Synthetic primer


<400> 29
ccgacccgc cgcgcgccgg acgccagtga cc				32

<210> 30
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature

<222> (1)..(32)
<223> Synthetic primer


<400> 30
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<210> 31
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<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(44)
<223> Synthetic primer


<400> 31
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<210> 32
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<220>
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<210> 33
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(30)
<223> Synthetic primer


<400> 33
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<210> 34
<211> 36
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(36)
<223> Synthetic primer


<400> 34
cgccgcccccc gcccgtgtga tagagaggta ctttca                    36

<210> 35
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(39)
<223> Synthetic primer


<400> 35
ccgccgcccc cgccgctttt tcaaagatgt ttcctttgc                   39

<210> 36
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<220>
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<223> Synthetic primer


<400> 36
tatcaccgag tgccaatgag                                        20

<210> 37
<211> 35
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<220>
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<222> (1)..(35)
<223> Synthetic primer


<400> 37
ccgccgcccc cgccggcctc aagtgttcca ctgat                       35

<210> 38

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<211> 35
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<220>
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<222> (1)..(35)
<223> Synthetic primer


<400> 38
cccccgcccg ttgtagaata gaataggaaa tttgg                          35

<210> 39
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<220>
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<222> (1)..(35)
<223> Synthetic primer


<400> 39
gccccgcccg ttggtgaaga aaaatatact agtca                         35

<210> 40
<211> 37
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<220>
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<222> (1)..(37)
<223> Synthetic primer


<400> 40
cgccgcccc gcccgtggaa ctcatttttt ttaaaga                       37

<210> 41
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<220>
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<222> (1)..(39)
<223> Synthetic primer



<400> 41

gcggggggcgg cgggccgttt tattatacac agtcacacc                                39

<210> 42
<211> 32
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<220>
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<222> (1)..(32)
<223> Synthetic primer


<400> 42
gccccccgccg cttcctttaa tttttgccct cc                                       32

<210> 43
<211> 39
<212> DNA
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<220>
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<222> (1)..(39)
<223> Synthetic primer


<400> 43
cgccgcccc gcccggaaac aatgctcatt ttatgtcag                                  39

<210> 44
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<222> (1)..(39)
<223> Synthetic primer


<400> 44
gcgccgcccc cgccgaaacc aagtctttta tttttctc                                  39

<210> 45
<211> 39
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<220>
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<223> Synthetic primer

<210> 45
ccgctgcccc cgccggatga atgttatctg tatcctctc                    39

<210> 46
<211> 37
<212> DNA
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<220>
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<222> (1)..(37)
<223> Synthetic primer


<400> 46
cgccgcccccc gcccggcaaa ttctgccaat tccttta                      37

<210> 47
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<222> (1)..(32)
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<400> 47
gccccccgccg tttgtccctc tgtactgtgt tt                           32

<210> 48
<211> 32
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<223> Synthetic primer


<400> 48
ccgcccccgc cgtgaccccc aacaccagtt tc                            32

<210> 49
<211> 40
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<220>
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<220> (1)..(40)
<223> Synthetic primer

<400> 49
cggcccgccg ccccgcccg ggacagccac ttcctcactt                40

<210> 50
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<220>
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<222> (1)..(20)
<223> Synthetic primer

<400> 50
cgtcgctcag cagcaggtcg                                      20

<210> 51
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<400> 51
cgtcctgctt cccgtcccg                                       19

<210> 52
<211> 42
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<220>
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<222> (1)..(42)
<223> Synthetic primer

<400> 52
cggtccgcc gccccgccg ttggggatgc tggcaatgtg tg               42

<210> 53
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<220>
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<223> Synthetic primer


<400> 53
gggattcggc aaagctgatg    20

<210> 54
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<220>
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<222> (1)..(20)
<223> Synthetic primer


<400> 54
ttccatcagc tttgccgaat    20

<210> 55
<211> 21
<212> DNA
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<220>
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<223> Synthetic primer


<400> 55
atctcgtctc aagcctggaa g    21

<210> 56
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<212> DNA
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<220>
<221> misc_feature
<222> (1)..(49)
<223> Synthetic primer


<400> 56
gtccggcggc cgtcccgccg ccccgccga gacccttccc accagacct    49

<210> 57

<211> 31
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(31)
<223> Synthetic primer


<400> 57
cgccccccgcc cgtgagccct gcccagtgtc t                          31

<210> 58
<211> 41
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<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(41)
<223> Synthetic primer


<400> 58
gggggccgcc gcccccgccg gagccaggag gagcagaacc c                41

<210> 59
<211> 22
<212> DNA
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<220>
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<222> (1)..(22)
<223> Synthetic primer


<400> 59
cagaggaca ggcaggcaaa gg                                      22

<210> 60
<211> 28
<212> DNA
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<220>
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<222> (1)..(28)
<223> Synthetic primer

<400> 60
gccccccgccg cccagccctc cagtgcct                                    28

<210> 61
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<220>
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<400> 61
atcgctatgt gctgcctggg                                              20

<210> 62
<211> 18
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<220>
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<222> (1)..(18)
<223> Synthetic primer


<400> 62
ccgaggtgga tgccgctg                                                18

<210> 63
<211> 21
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<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 63
gaatgggagt gggcagcaga c                                            21

<210> 64
<211> 21
<212> DNA
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<220>
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<222> (1)..(21)
<223> Synthetic primer

<400> 64
cactgaccgt tgacaccctc g                                                21

<210> 65
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 65
tgcccagtg cttcagagat c                                                 21

<210> 66
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(19)
<223> Synthetic primer


<400> 66
ggagtgcct gagccccct                                                    19

<210> 67
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> Synthetic primer


<400> 67
tcctaatca cagccagcg                                                    19

<210> 68
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<210> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 68
tctgttcgtc ctagtgtcct g                                        21


<210> 69
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 69
gcaggaggqc aggttgtaga a                                        21

<210> 70
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(40)
<223> Synthetic primer


<400> 70
gcggcccgtc gccccgccg ggtagggga gtctgggctt                      40

<210> 71
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(17)
<223> Synthetic primer


<400> 71
gagtncactc cgagtcc                                             17

<210> 72
<211> 20
<212> DNA

27

<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 72
attgggcatc tctgacggtg                                                    20

<210> 73
<211> 35
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(35)
<223> Synthetic primer


<400> 73
cgcgcccccc gccgggaag gtggcctgag gagat                                    35

<210> 74
<211> 37
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(37)
<223> Synthetic primer


<400> 74
gcggccgcc gccccgccg ggggtccacg ggccatg                                   37

<210> 75
<211> 20
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<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 75
aagcccagca gcacggtgag                                                    20

28

<210> 76
<211> 34
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(34)
<223> Synthetic primer


<400> 76
ccgccgcccc cgccgctgcc ctgcctgtgc cctg                                    34

<210> 77
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(51)
<223> Synthetic primer


<400> 77
ggccgcgcc cgtcccgccg cccccgcccg ttccaccacc acgtccacca c                  51

<210> 78
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 78
gtggtggacg tggtggtgga a                                                  21

<210> 79
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer

<400> 79
ggctgctgcc ctcactggga a 21

<210> 80
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 80
taagggcaga gtcctccaca g 21

<210> 81
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(22)
<223> Synthetic primer


<400> 81
ccacccggc ccacctactg ag 22

<210> 82
<211> 40
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(40)
<223> Synthetic primer


<400> 82
gggccgcc gccccgccg tggagggagg gacgccaatc 40

<210> 83
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> Synthetic primer

<400> 83
gaggctgggg ctgggacaa                                                    19


<210> 84
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer



<400> 84
ccggttcac tcactgcg                                                      18


<210> 85
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(30)
<223> Synthetic primer



<400> 85
cccccgcccg ccgtgctcag agcctgaaag                                        30


<210> 86
<211> 38
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(38)
<223> Synthetic primer



<400> 86
gggggggc ttctgccgag cgggtgggga gcaggtgg                                 38


<210> 87
<211> 36
<212> DNA
<213> Artificial Sequence

<220>

<221> misc_feature
<222> (1)..(36)
<223> Synthetic primer


<400> 87
cgccgccccc gccggctct gggtcaggac agggga                                    36

<210> 88
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 88
cgcctggggg tgttcttt                                                       18

<210> 89
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(13)
<223> Synthetic primer


<400> 89
aggtgatgtt gtcgcccg                                                       18

<210> 90
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(32)
<223> Synthetic primer


<400> 90
ccctcgccg gggcgcccc gtggtggtca gc                                         32

<210> 91
<211> 18
<212> DNA

<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 91
caggctgcct gggatgc                                                    18

<210> 92
<211> 18
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 92
ctgaaggtgc tgcgcgtt                                                   18

<210> 93
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(30)
<223> Synthetic primer


<400> 93
cgccccgcc cgctggctcc acgcagatgc                                       30

<210> 94
<211> 18
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 94
cgtgaacagg gcgcatta                                                   18

<210> 95
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(31)
<223> Synthetic primer


<400> 95
ccccgcccg gcagcagaga tgttgttgga c        31

<210> 96
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(36)
<223> Synthetic primer


<400> 96
cagcgcccc cgccgccagg ctcctatctt gtgaca        36

<210> 97
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 97
tgaactcatc tgtgtgttg t        21

<210> 98
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> Synthetic primer

<400> 98
ctacctgtgg gatctgggg                                                              19


<210> 99
<211> 18
<212> DNA
<213> Artificial Sequence


<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer



<400> 99
tgctgaagct cacgctcc                                                               18


<210> 100
<211> 20
<212> DNA
<213> Artificial Sequence


<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer



<400> 100
gggctcgtcg tcaatgcaag                                                             20



<210> 101
<211> 40
<212> DNA
<213> Artificial Sequence


<220>
<221> misc_feature
<222> (1)..(40)
<223> Synthetic primer



<400> 101
tgctgccttc gccgccgcc caccacctgc agccctcta                                         40


<210> 102
<211> 40
<212> DNA
<213> Artificial Sequence


<220>
<221> misc_feature
<222> (1)..(40)
<223> Synthetic primer

<400> 102
cggcccgcc gcccccgccg ccgcccagga cagcatcttc                    40

<210> 103
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer

<400> 103
cgctcccag catgttgg                                            18

<210> 104
<211> 24
<212> DNA
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<220>
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<222> (1)..(24)
<223> Synthetic primer

<400> 104
gcccagcacc ggcaaaggct tctc                                    24

<210> 105
<211> 19
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(19)
<223> Synthetic primer

<400> 105
gcccagcacc agctcacat                                          19

<210> 106
<211> 21
<212> DNA
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<220>

<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 106
cgagccattt accacccata g                                                    21

<210> 107
<211> 20
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(.0)
<223> Synthetic primer


<400> 107
ggcagccagc aggatctgaa                                                      20

<210> 108
<211> 21
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 108
atgtgggcca gcagcaaggt g                                                    21

<210> 109
<211> 21
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 109
cctgaacttc cagcaccagc g                                                    21

<210> 110
<211> 21
<212> DNA

<210> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 110
aggtccaggg cgactcgctg g                                                    21

<210> 111
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 111
cagggccaca cgcgctgggc g                                                    21

<210> 112
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 112
ttgtaggccc acgttgacct g                                                    21

<210> 113
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(31)
<223> Synthetic primer


<400> 113
ccccgcccg catgggtgtg gacgggtgag g                                          31

38

<210> 114
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 114
taaaactgga tggggctctc                                                                  20

<210> 115
<211> 18
<212> DNA
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<220>
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<222> (1)..(18)
<223> Synthetic primer


<400> 115
ggcctccacc agcactaa                                                                     18

<210> 116
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<220>
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<222> (1)..(20)
<223> Synthetic primer


<400> 116
ggggtccccca gtccttccag                                                                  20

<210> 117
<211> 17
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(17)
<223> Synthetic primer

39

<400> 117
tccccagccc gcccaca                                                      17

<210> 118
<211> 20
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 118
gcccctcac cacccttct                                                     20

<210> 119
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<212> DNA
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<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 119
tccgctggt cccccacgc a                                                   21

<210> 120
<211> 18
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 120
aatgccgtgg ggaccgtc                                                     18

<210> 121
<211> 20
<212> DNA
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<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer

<400> 121
gtgagcaggt ggcagtctcg                                                    20

<210> 122
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 122
ccacccctc tgctcgtagg t                                                   21

<210> 123
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(19)
<223> Synthetic primer


<400> 123
ggtcccaagc acgcatgca                                                     19

<210> 124
<211> 22
<212> DNA
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<220>
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<222> (1)..(22)
<223> Synthetic primer


<400> 124
tgccgcctc ctgcgctgct ga                                                  22

<210> 125
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<220> misc_feature
<222> (1)..(79)
<223> Synthetic primer


<400> 125
gcgggcaggg tgagcaggtg gggccatcc                                          29

<210> 126
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(26)
<223> Synthetic primer


<400> 126
gaggctgtgg gggtccagtc aagtgg                                             26

<210> 127
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(25)
<223> Synthetic primer


<400> 127
agggaggcag aggaaagggc cgaac                                              25

<210> 128
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(29)
<223> Synthetic primer


<400> 128
cgtccgtct gcactgacct cacgcatgt                                          29

<210> 129
<211> 41
<212> DNA

<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(41)
<223> Synthetic primer


<400> 129
cggccgcccg ccccgcccg gccaaaggga aagggattgg a          41

<210> 130
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 130
ccgcggagcc tgctgtgcta t          21

<210> 131
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(39)
<223> Synthetic primer


<400> 131
nnnngcnnc cgccgcttg gtggagacgg tgtagttgc          39

<210> 132
<211> 21
<212> DNA
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<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 132
tccaatccct ttccctttgg c          21

43

<210> 133
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(22)
<223> Synthetic primer


<400> 133
cagaagccca tgaaacagaa ag                                                    22

<210> 134
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 134
tatacttca ggcccgtggc a                                                      21

<210> 135
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer


<400> 135
agagcccata ccaggtccag tcc                                                   23

<210> 136
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(23)
<223> Synthetic primer

<400> 136
ggactggacc gggtatgggc tct                                              23

<210> 137
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(31)
<223> Synthetic primer

<400> 137
cccccgcccg cacccaggcc ctcctcgact c                                     31

<210> 138
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(30)
<223> Synthetic primer

<400> 138
ccccagccgc tgggtgggct cggctctatc                                       30

<210> 139
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer

<400> 139
tggtagcgat gctcacgtca ctt                                              23

<210> 140
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(23)
<223> Synthetic primer

<400> 140
cagcccaaag ctgagatgac ttg          23


<210> 141
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(20)
<223> Synthetic primer


<400> 141
agattcgcag gagggaggtc          20


<210> 142
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(18)
<223> Synthetic primer


<400> 142
ccctctgccc ccgcattg          18


<210> 143
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(21)
<223> Synthetic primer


<400> 143
aagttcaaaa gggctgcgtc g          21


<210> 144
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<210> misc_feature
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<223> Synthetic primer


<400> 144
gggcctccct gccttctagg cg                                              22

<210> 145
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 145
ccgtgctgtg tgaaggagag                                                 20

<210> 146
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 146
cctcttcctg cccagccctt c                                               21

<210> 147
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 147
cttccgagc agcctttggt g                                                21

<210> 148
<211> 20
<212> DNA

<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 148
ctgagctgcc gcccgctgac                                                    20

<210> 149
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 149
aggacccca gcccagccca                                                     20

<210> 150
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(13)
<223> Synthetic primer


<400> 150
cttggcgcag cttggact                                                      13

<210> 151
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 151
acacccagca aggacacgca                                                    20

<210> 152
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 152
tgtgacacat cccctggtac                                          20

<210> 153
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 153
gcaagggtga gcttcagagc                                          20

<210> 154
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(51)
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<400> 154
gcccgcgcc cgtccgccg ccccgcccg accctatgcc tcctgtacct c          51

<210> 155
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
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<222> (1)..(18)
<223> Synthetic primer

<400> 155
cccctcctct ggcaatcc                                                              18


<210> 156
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 156
cctgccggga gcacgacgag                                                            20


<210> 157
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 157
ctgggctggg gcacggcggg                                                            20


<210> 158
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 158
ggggctacc acggcgcggg c                                                           21


<210> 159
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer

<400> 159
ttggggcgtt catttggatc                                                      20


<210> 160
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer



<400> 160
accacacaga aataggaggg                                                      20


<210> 161
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(24)
<223> Synthetic primer



<400> 161
ttgttattgt tttaattgtt ctta                                                 24


<210> 162
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(25)
<223> Synthetic primer



<400> 162
ctactctgac taaatttttc ttctt                                                25


<210> 163
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 163
tttggttttg tattgtggtg                                                    20


<210> 164
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic primer


<400> 164
aaggatttac gaagtttaaa ttg                                                23

<210> 165
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(21)
<223> Synthetic primer


<400> 165
agaacctag gaagcatgat t                                                   21

<210> 166
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 166
taggtactaa atcaaatccg                                                    20

<210> 167
<211> 20
<212> DNA

<210> Artificial Sequence

<220>
<221> misc_feature
<222> (1)..(20)
<223> Synthetic primer


<400> 167
gtctcagtgt tctgctcctc                                    20

<210> 168
<211> 22
<212> DNA
<213> Artificial Sequence Sequence

<220>
<221> misc_feature
<222> (1)..(22)
<223> Synthetic primer


<400> 168
aaatacaact gtcagcaaca ta                                 22